CLAIMS

1. A tool for machine working of workpieces (40), comprising
a tool holder (12) having a fixing element (19) with a shank section (22) and a gripping head (24) thicker than the shank section and
a cutting insert (13) to be fixed to the tool holder,
which cutting insert having at least one blade (39),
an opening (30) for the fixing element (19) and
at least one gripping surface (33) cooperating with the gripping head (24),
the tool holder (12) having tensioning means for the fixing element (19),
the cutting insert having a slot (36) connecting the opening (39) to an outer edge (35) of the cutting insert (19),
the slot having a width not smaller than the thickness of the shank section (22).

2. Tool according to claim 1, wherein the fixing element (19) is placed in captive manner in the tool holder (12).

3. Tool according to claim 1, wherein the fixing element (19) is operable for clamping and unclamping purposes from the back (48) of the tool holder (12) opposite to the cutting insert (13).

4. Tool according to claim 2, wherein the fixing element is operable from both sides.

5. Tool according to claims 1, characterized in that the cutting insert is constructed as a reversible plate and with a gripping surface on both sides of the opening.

6. Tool according to claim 1, wherein the fixing element (19) being a screw with internal key surfaces (26, 44) on both end faces and the tensioning means being an internal thread in the tool holder.

7. Tool according to claim 6, wherein the screw is engaged by a rotatable tightening key (27), having an engagement depth (a) for engaging in at least one of the key surfaces (44), the engagement depth being so limited with respect to the tool holder by a stop (51) that its rotation is interrupted before a thread (20) of the fixing element (19) and the tool holder are disengaged.

8. Tool according to claim 1, wherein the gripping head (24) and associated gripping surface (33) are substantially conical.

9. Tool according to claim 1, wherein between the gripping head (24) and the associated gripping surface (33) is provided a washer (50) adapted thereto.

10. Tool according to claim 1, wherein the width of the slot (36) is smaller than the transverse dimensions of the gripping head (24).

11. Tool according to claim 1, wherein the cutting insert (13) has at least one leg (37) bounding the slot (36).

12. Tool according to claim 1, wherein the cutting insert (13) has at least one orienting face (38) and the tool holder (12) at least one stop face (17) cooperating with the orienting face (38).

13. Tool according to claim 12, wherein on both sides of the slot (36) are provided orienting faces (17) on the outside of legs (37) bounding the opening (30).

14. Tool according to claim 12, wherein the gripping head (24) and gripping surface (33) are conically and having central axes (18, 31), the axes being so positioned with respect to the at least one orienting face (38) and stop face (17) that the spacing of the gripping head central axis (18) from the stop face (17) is somewhat smaller than the spacing of the central axis (31) of the gripping face (33) from the orienting face (38).

15. Tool according to claim 1, wherein the tool holder (12) have a shank (14) being provided with a hard metal core (15).

16. Tool according to claim 1, being a tool for universal machines by lathe working.

17. A cutting insert for tools for machine working of workpieces (40), for fixing to a tool holder (12) with a fixing element (19) including a shank section (22) and a gripping head (24), the cutting insert (13) comprising at least one blade (39), an opening (30) for the fixing element (19) and a gripping surface (33) for the gripping head (24), the cutting insert (13) having a slot (36) connecting the opening (30) to an outer edge (35) of the cutting insert (13), the slot having a width being not smaller than that of the shank section (22).

18. Cutting insert according to claim 17, characterized in that it is triangular with three corners, with a substantially central opening (30) and with a slot (36) provided in one corner and where blades (39) are provided at the two other corners.

19. Method for fixing or removing a cutting insert (19) with an opening (30) to or from a tool holder (12), where a fixing element (13) with a shank section (22) and a gripping head (24) thicker than the shank section can be moved between a loosening position and a gripping position, wherein in the loosening position of the fixing element (19), the cutting insert (13) can be moved over or removed from the shank section (22) of the fixing element (19) transversely to its extension.

20. Method according to claim 19, characterized in that the fixing element (19) can be moved in screwing manner between the loosening and gripping positions and the loosening position is secured against further loosening.